## ATTORNEY DOCKET NO.: AVX-38-RE

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Reissue of Cain et al.	) ) Examiner: Unknown
Patent No.: 5,898,562	) Art Unit: Unknown
Issued: April 27, 1999	) Deposit Acct. No.: 04-1403
Title: Integrated Dual Frequency Noise Attenuator	) )

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

## ASSENT OF ASSIGNEE PURSUANT TO 37 C.F.R. §1.172

Sir:

AVX Corporation of Myrtle Beach, South Carolina, is the owner by assignment of all right, title and interest in U.S. Patent No. 5,898,562 entitled "INTEGRATED DUAL FREQUENCY NOISE ATTENUATOR" to Jeffery C. Cain and John E. Barris issued on April 27, 1999. AVX requests and assents to the application for reissue of the '562 patent in accordance with 37 C.F.R. §§1.171-1.179.

## A proper certificate under 37 C.F.R. §3.73(b) as attached in accordance with MPEP §1410.01.

Respectfully submitted,

Kurt Cummings

Vice President, CFO, Treasurer and Secretary

AVX Corporation P.O. Box 867

Myrtle Beach, SC 29578

## Attorney Docket No. C-1070-001-C0566

#### <u>ASSIGNMENT</u>

WHEREAS, WE, Jeffery C. Cain and John E. Barris, both citizens of the United States of America, residing respectively at 1769 Crooked Pine Drive, Surfside Beach, South Carolina 29575 and 407 Lovell Street, Worcester, Massachusetts 01602, hereinafter called "Assignors", have made certain inventions in a INTEGRATED DUAL FREQUENCY NOISE ATTENUATOR, described in a specification executed by us preparatory to making application for Letters Patent therefor on even date herewith; and

WHEREAS, AVX Corporation, a Delaware Corporation, with a place of business at 801 17th Avenue South, Myrtle Beach, South Carolina 29577, hereinbelow called "Assignee", is desirous of securing an undivided One Hundred Percent (100%) of the entire right, title and interest in and to the said inventions, applications and Letters Patent, when granted, and in and to any divisions, continuations, improvements, reissues or extensions that may be made or granted on any of them;

NOW, THEREFORE, BE IT KNOWN that for and in consideration of the sum of One Dollar (\$1.00) to us in hand paid by the said Assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said Assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over unto the said Assignee, its successors and assigns, an undivided One Hundred Percent (100%) of the entire right, title and interest throughout the world in and to the said inventions, applications and Letters Patent, when granted, and in and to any divisions, continuations, improvements, reissues or extensions that may be made or granted on any of them;

TO HAVE AND TO HOLD the same to the full end of the term or terms for which said Letters Patent may be granted, as fully and completely as the same might be held by us had this sale and assignment not been made.

For the consideration aforesaid, we hereby covenant and agree to and with the said Assignee, its successors and assigns that whenever its counsel or representative, or the counsel or representative of its successors or assigns, shall advise that formal application papers must be executed or an amendment to, or a division of, or any other proceeding or action in connection with said application or inventions, including interference proceedings, is lawful and desirable, or that a reissue or continuation or extension of said Letters Patent is lawful and desirable, we will sign all papers and drawings, take all rightful oaths and affidavits, and do all acts necessary or required to be done for the reissue or continuation or extension of same, and will do all acts necessary or required to secure to the said Assignee, its successors or assigns, the title to and full benefit of all rights hereby assigned, without charge to said Assignee or its successors or assigns, but at its or their expense.

AND the Commissioner of Patents and Trademarks is requested to issue the said Letters patent, when granted, in accordance with this sale and assignment.

For the consideration aforesaid, we have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto the said Assignee, its successors and assigns, or the nominees of any of them, an undivided One Hundred Percent (100%) of the entire right, title and interest in and to any and all Letters Patent for said inventions which may be granted in countries foreign to the United States, and in and to any applications for Letters Patent which may be filed for said inventions in countries foreign to the United States, and in and to the inventions described in said applications; and we hereby authorize and empower said Assignee and its successors, assigns or nominees, to apply for Letters Patent or other form of protection on said inventions in its own name or in the name of its successors, assigns or nominees, in any or all countries where it may desire to file such applications, and where said applications may be filed by another other than the inventor; and we hereby covenant and agree to sign all papers and drawings, take all rightful oaths, execute all rightful affidavits, and do all acts necessary or required to be done for the procurement and maintenance of Letters Patent or other form of protection for said inventions in countries foreign to the United States, and for further investing or confirming the right and title thereto in the Assignee, its successors, assigns or nominees, but at its or their expense.

Date: $\frac{4/1/97}{1}$	Jeffery C. Cain
Date:	John E. Barris

## Attorney Docket No. C-1070-001-C0566

#### **ASSIGNMENT**

WHEREAS, WE, Jeffery C. Cain and John E. Barris, both citizens of the United States of America, residing respectively at 1769 Crooked Pine Drive, Surfside Beach, South Carolina 29575 and 407 Lovell Street, Worcester, Massachusetts 01602, hereinafter called "Assignors", have made certain inventions in a INTEGRATED DUAL FREQUENCY NOISE ATTENUATOR, described in a specification executed by us preparatory to making application for Letters Patent therefor on even date herewith; and

WHEREAS, AVX Corporation, a Delaware Corporation, with a place of business at 801 17th Avenue South, Myrtle Beach, South Carolina 29577, hereinbelow called "Assignee", is desirous of securing an undivided One Hundred Percent (100%) of the entire right, title and interest in and to the said inventions, applications and Letters Patent, when granted, and in and to any divisions, continuations, improvements, reissues or extensions that may be made or granted on any of them;

NOW, THEREFORE, BE IT KNOWN that for and in consideration of the sum of One Dollar (\$1.00) to us in hand paid by the said Assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said Assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over unto the said Assignee, its successors and assigns, an undivided One Hundred Percent (100%) of the entire right, title and interest throughout the world in and to the said inventions, applications and Letters Patent, when granted, and in and to any divisions, continuations, improvements, reissues or extensions that may be made or granted on any of them;

TO HAVE AND TO HOLD the same to the full end of the term or terms for which said Letters Patent may be granted, as fully and completely as the same might be held by us had this sale and assignment not been made.

For the consideration aforesaid, we hereby covenant and agree to and with the said Assignee, its successors and assigns that whenever its counsel or representative, or the counsel or representative of its successors or assigns, shall advise that formal application papers must be executed or an amendment to, or a division of, or any other proceeding or action in connection with said application or inventions, including interference proceedings, is lawful and desirable, or that a reissue or continuation or extension of said Letters Patent is lawful and desirable, we will sign all papers and drawings, take all rightful oaths and affidavits, and do all acts necessary or required to be done for the reissue or continuation or extension of same, and will do all acts necessary or required to secure to the said Assignee, its successors or assigns, the title to and full benefit of all rights hereby assigned, without charge to said Assignee or its successors or assigns, but at its or their expense.

AND the Commissioner of Patents and Trademarks is requested to issue the said Letters patent, when granted, in accordance with this sale and assignment.

For the consideration aforesaid, we have sold, assigned, transferred and set over and by these presents do sell, assign, transfer and set over unto the said Assignee, its successors and assigns, or the nominees of any of them, an undivided One Hundred Percent (100%) of the entire right, title and interest in and to any and all Letters Patent for said inventions which may be granted in countries foreign to the United States, and in and to any applications for Letters Patent which may be filed for said inventions in countries foreign to the United States, and in and to the inventions described in said applications; and we hereby authorize and empower said Assignee and its successors, assigns or nominees, to apply for Letters Patent or other form of protection on said inventions in its own name or in the name of its successors, assigns or nominees, in any or all countries where it may desire to file such applications, and where said applications may be filed by another other than the inventor; and we hereby covenant and agree to sign all papers and drawings, take all rightful oaths, execute all rightful affidavits, and do all acts necessary or required to be done for the procurement and maintenance of Letters Patent or other form of protection for said inventions in countries foreign to the United States, and for further investing or confirming the right and title thereto in the Assignee, its successors, assigns or nominees, but at its or their expense.

Jeffery C. Cain

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Date: _		-
		John E. Barris
Date: _	4/14/97	

## ATTORNEY DOCKET NO.: AVX-38-RE

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Reissue of Cain et al.	) Examiner: Unknown
Patent No.: 5,898,562	) Art Unit: Unknown
Issued: April 27, 1999	) Deposit Acct. No.: 04-1403
Title: Integrated Dual Frequency Noise Attenuator	) )

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

# DECLARATION OF JEFFERY C. CAIN UNDER 37 C.F.R. §§1.63 AND 1.175 AND POWER OF ATTORNEY

Sir:

I, Jeffery C. Cain, make this declaration under 37 C.F.R. §§1.63 and 1.175 in the support of the above-captioned reissue application of my U.S. Patent No. 5,898,562:

## 37 C.F.R. §1.175 DECLARATION

- 1. My name is Jeffery C. Cain of Santa Clara, California. I was formerly employed by the assignee of U.S. Patent No. 5,898,562, AVX Corporation of Myrtle Beach, South Carolina. All right, title, and interest of the '562 patent are owned by AVX Corporation.
- 2. I verily believe that my captioned '562 original patent is partially inoperative because one of the figures is inconsistent with the remainder of specification, claims, and abstract. More specifically, I believe that the captioned original patent is partially

inoperative because Figure 2 incorrectly depicts the disclosed and claimed subject matter of the patent. As claimed the captioned original patent specifies an integrated ceramic bypass device providing parallel-connected ceramic capacitors of disparate capacitor values in a single component package. Further, a multi-layer embodiment, as depicted in original Figure 2, is disclosed. In particular, the embodiment shown in Figure 2 lacks a necessary dielectric layer between each "single unit", wherein each unit is comprised of "upper and lower electrodes and intervening dielectric layer." See column 3, lines 15-16. The patent is partially inoperative because Figure 2 fails to show a necessary dielectric layer between stacked "single units". It was never the intention of the disclosure or claims to imply that such an intervening dielectric layer was not necessary. In fact, in column 2 lines 18-26, the specification particularly points out that the pair of disparate value capacitors are connected in parallel. One of ordinary skill in the art, would recognize that should "single units" be stacked without the necessary intervening dielectric layer that such device would short circuit and be non-functioning.

- 3. The deficiency of Figure 2 of the captioned '562 patent arose without deceptive intent on my part. I believe that the deficiency in Figure 2 relates to my failing to recognize and appreciate among the many layers depicted in Figure 2 that such a necessary intervening dielectric layer was missing.
- 4. The error that lead to the above deficiency in Figure 2 of the captioned '562 patent arose without any deceptive intent on my part. The manner in which the matter arose and the manner in which the error was discovered are explained as follows: the invention disclosed and claimed in my '562 patent was developed in the course of

my work at AVX Corporation, assignee of all rights, title and interest in the '562 patent. Prior to the filing date of the patent application (May 9, 1997) I had developed a new and improved integral dual frequency bypass device having a pair of parallel disparate value capacitors. The new device was particularly useful in dual mode cellular phones for providing a low impedance path to ground on two discrete frequencies. After discussing the same with my supervisors, it was decided to file a patent application on the device. I reviewed the patent application and signed the original declaration on April 17, 1997. In late 1999, a fellow employee of AVX Corporation, while working on alternative embodiments of the claimed device detected the error in Figure 2 of the '562 patent. Immediate communications were made with AVX new patent counsel regarding any needed changes to correct the patent. On August 8, 2000, our patent attorney informed us that Figure 2 of the U.S. Patent 5,898,562 apparently did not accurately portray the disclosed and claimed subject invention. In particular, they specified that Figure 2 required correction. It was decided after review to file the present reissue application wherein the arguably confusing Figure 2 was to be corrected by submitting a corrective drawing. The present reissue application overcomes the defect in the original patent by the addition of the corrective drawing. The new claims ensure claim language directed to the intervening dielectric layer(s) within the new drawing.

5. I acknowledge my duty to disclose information which is material to the examination of this application in accordance with 37 C.F.R. §§1.175 and 1.56.

#### **DECLARATION UNDER 37 C.F.R. §1.63**

- 6. My residence, my address, and citizenship are stated below next to my name.
- 7. I believe that I am an original, first, and co-inventor of the subject matter

which is claimed and for which a reissue patent is sought on the invention entitled "INTEGRATED DUAL FREQUENCY NOISE ATTENUATOR," the specification of which is submitted herewith (U.S. Patent No. 5,898,562) and with additions to the patent indicated by underlining and any deletions to the patent surrounded by the squared brackets.

- 8. I hereby state that I reviewed and understand the contents of the aboveidentified specifications submitted herewith, including any and all claim amendments.
- 9. I acknowledge the duty to disclose information which is material to the examination of this application and in accordance with 37 C.F.R. §1.56.
- 10. I hereby appoint the following attorneys to prosecute this application and transact all business in the Patent and Trademark Office connected herewith:

Wellington M. Manning, Jr. Julian W. Dority	Registration No. 22,376 Registration No. 20,268
James M. Bagarazzi Richard M. Moose Stephen E. Bondura Timothy A. Cassidy Jeffrey M. Karmilovich Frances Barnes Elliott	Registration No. 29,609 Registration No. 31,226 Registration No. 35,070 Registration No. 38,024 Registration No. 35,915
J. Bennett Mullinax John E. Vick, Jr. Jason W. Johnston Tim F. Williams Charles R. Ducker, Jr. Neal P. Pierotti Bernard S. Klosowski, Jr.	Registration No. 41,598 Registration No. 36,221 Registration No. 33,808 Registration No. 45,675 Registration No. 47,178 Registration No. 46,542 Registration No. 45,716 Registration No. 47,710

Send correspondence to: Attorney Charles R. Ducker, Jr., DORITY & MANNING, P.A. P. O. Box 1449, Greenville, SC 29602-1449.

Direct telephone calls to: Attorney Charles R. Ducker, Jr., Phone: (864) 271-1592, Facsimile: (864) 233-7342

11. I hereby declare that all statements made herein on my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor's signature: Date: 4/24/0/
Jeffery C. Cain
Address: 2465 Michele Jean Court, Santa Clara, California 95050
Citizenship: United States of America

#### ATTORNEY DOCKET NO.: AVX-38-RE

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Reissue of Cain et al.	) Examiner: Unknown
Patent No.: 5,898,562	) Art Unit: Unknown
Issued: April 27, 1999	) Deposit Acct. No.: 04-1403
Title: Integrated Dual Frequency Noise Attenuator	) }

Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231

## **DECLARATION OF JOHN E. BARRIS** UNDER 37 C.F.R. §§1.63 AND 1.175 AND POWER OF ATTORNEY

Sir:

In sa Analisation

I, John E. Barris, make this declaration under 37 C.F.R. §§1.63 and 1.175 in the support of the above-captioned reissue application of my U.S. Patent No. 5,898,562:

## 37 C.F.R. §1.175 DECLARATION

- was Formerly of S 1. My name is John E. Barris of Hopkinton, Massachusetts. Lam employed by the assignee of U.S. Patent No. 5,898,562, AVX Corporation of Myrtle Beach, South Carolina. All right, title, and interest of the '562 patent are owned by AVX Corporation.
- 2. I verily believe that my captioned '562 original patent is partially inoperative because one of the figures is inconsistent with the remainder of specification, claims, and abstract. More specifically, I believe that the captioned original patent is partially inoperative because Figure 2 incorrectly depicts the disclosed and claimed subject

matter of the patent. As claimed the captioned original patent specifies an integrated ceramic bypass device providing parallel connected ceramic capacitors of disparate capacitor values in a single component package. Further, a multi-layer embodiment, as depicted in original Figure 2, is disclosed. In particular, the embodiment shown in Figure 2 lacks a necessary dielectric layer between each "single unit", wherein each unit is comprised of "upper and lower electrodes and intervening dielectric layer." See column 3, lines 15-16. The patent is partially inoperative because Figure 2 fails to show a necessary dielectric layer between stacked "single units". It was never the intention of the disclosure or claims to imply that such a intervening dielectric layer was not necessary. In fact, in column 2 lines 18-26, the specification particularly points out that the pair of disparate value capacitors are connected in parallel. One of ordinary skill in the art, would recognize that should "single units" be stacked without the necessary intervening dielectric layer that such device would short circuit and be nonfunctioning.

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- 6. My residence, my address, and citizenship are stated below next to my name.
- 7. I believe that I am an original, first, and co-inventor of the subject matter which is claimed and for which a reissue patent is sought on the invention entitled

"INTEGRATED DUAL FREQUENCY NOISE ATTENUATOR," the specification of which is submitted herewith (U.S. Patent No. 5,898,562) and with additions to the patent indicated by underlining and any deletions to the patent surrounded by the squared brackets.

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J. Bennett Mullinax	Registration No. 36,221
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Jason W. Johnston	Registration No. 45,675
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Charles R. Ducker, Jr.	Registration No. 46,542
Neal P. Pierotti	Registration No. 45,716
Bernard S. Klosowski, Jr.	Registration No.47,710

Send correspondence to: Attorney Charles R. Ducker, Jr., DORITY & MANNING, P.A. P. O. Box 1449, Greenville, SC 29602-1449.

Direct telephone calls to: Attorney Charles R. Ducker, Jr., Phone: (864) 271-1592, Facsimile: (864) 233-7342

11. I hereby declare that all statements made herein on my own knowledge are

true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Inventor's signa	Date: 4-26	~
(	John E. Barris	
Address: <u>5 Oliv</u>	er Lane, Hopkinton, Massachusetts 01748	
Citizenship:	United States of America	